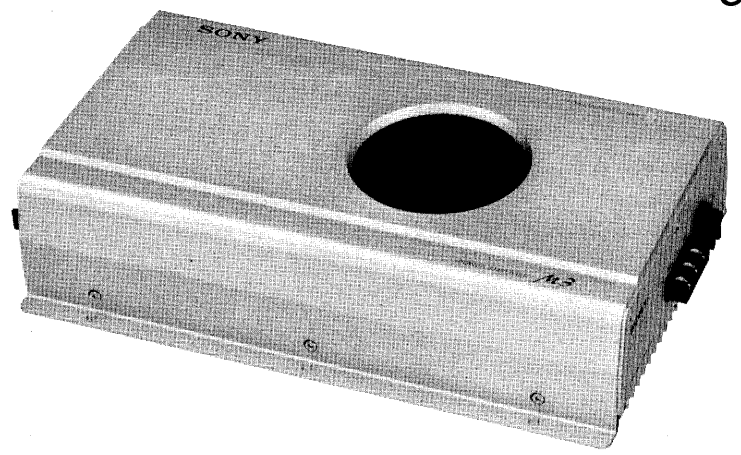
# XES-M3

# SERVICE MANUAL

*US Model*
*Canadian Model*
*AEP Model*
*UK Model*
*E Model*




**SPECIFICATIONS**

## Audio power specifications

Power output and total harmonic distortion 150 watts per channel minimum continuous average power into 4 ohms, both channels driven from 20 – 20,000 Hz with no more than 0.02% total harmonic distortion per Car Stereo Ad Hoc Committee standards.

Other Specifications

Power output* 150 watts per channel into 4 ohms, both channels driven from 20 – 20,000 Hz with no more than 0.02% THD

250 watts per channel into 2 ohms, both channels driven from 20 – 20,000 Hz with no more than 0.08% THD

500 watts (monaural) into 4 ohms, from 20 – 20,000 Hz with no more than 0.1% THD

Speaker impedance 2 – 8 ohms

Frequency responce 2 – 100,000 Hz $\pm^{0}_{3}$ dB

Total harmonic distortion 0.002% (at 1 kHz, 4 ohms, 150 watts)

Signal-to-noise ratio 110 dB (A-weighted)

Damping factor 300 (at 1 kHz, 4 ohms)

Input Sensitivity 0.2 – 2 V

Power requirements 12 V DC car battery (negative ground)

Current draw 3 A (at idle)
34 A (at rated power output, 4 ohms)

Mounting dimensions Approx. 230 × 80 × 364 mm (w/h/d)
($9\frac{1}{8} \times 3\frac{1}{4} \times 14\frac{3}{8}$ inches)

Weight Approx. 5.5 kg (12 lb 2 oz)

Accessories supplied Mounting screw (1 set)

* Measured at 14.4 V

Design and specifications subject to change without notice.

**POWER AMPLIFIER**

**SONY**®

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This section is extracted from instruction manual.

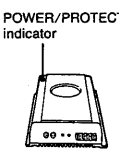
# Precautions

## Precautions for Operating

- This unit is designed for negative ground 12 V DC operation only.
- Use speakers with an impedance of 2 to 8 ohms.
- Avoid installing the unit where it would be:
  - — subject to high temperatures, such as from direct sunlight or from hot air from the heater.
  - — exposed to rain or moisture.
  - — subject to dust or dirt.
- If your car is parked in direct sunlight and there is a considerable rise in temperature inside the car, allow the unit to cool off before operating.
- If this unit is placed too close to the car radio, an interference may occur. In this case, separate the amplifier from the car radio.
- Do not cover the sides of the heat sinks and fan by the carpet etc.
- This power amplifier employs a protection circuit* to protect the transistors and speakers if the amplifier malfunctions. Do not attempt to test the protection circuits by covering the heat sinks or connecting improper loads.

* **Protection circuit**
This amplifier is provided with a protection circuit which operates when:
- the unit is overheated
- a DC current is generated
- the speaker terminals are short circuited
- the voltage of the battery is too high or too low
- an excessive output signal is generated

When a protection circuit activates, there will be an abrupt loss of sound from the speakers. If this happens, turn off the connected equipment and take out the cassette tape or disc and determine the cause of the malfunction. If the amplifier has overheated, wait until the unit cools off.

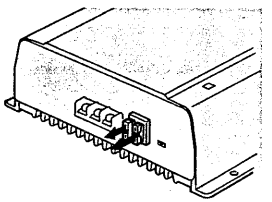



If you have any question or problem concerning your unit that is not covered in this manual, please consult your nearest Sony dealer.

## Fuse Replacement

If the fuse blows, check the power connection and replace the fuse. If the fuse blows again after replacement, there may be an internal malfunction. In this case, consult your nearest Sony dealer.

**Warning**
Use the specified ampere fuse.
Use of a higher amperage fuse may cause serious damage.







# Installation

## Before Installation

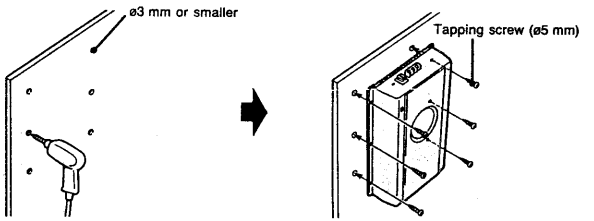
- Install the unit in the trunk compartment, horizontally or vertically, using a suitable mounting board of more than 15 mm thick.
- Choose the mounting location carefully so that the unit will not be exposed to direct sunlight or hot air from the heater.
- Do not install the unit under the floor carpet, where the heat dissipation from the unit will be considerably impaired.
- When securing the unit directly to the body of the car, avoid positioning it where it might be exposed to corrosion or water leakage.

## Installing the Unit Vertically

Prepare a suitable mounting board to install the unit securely.

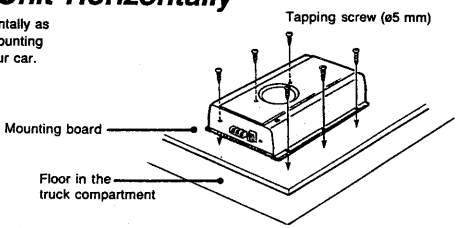
**1** **Secure the mounting board in the trunk compartment.**

**2** **Secure the mounting bracket to the mounting board.**




## Installing the Unit Horizontally

The unit can be installed horizontally as illustrated below. Choose the mounting procedure which better suits your car.




**Note**
Do not cover the both sides of the heat sinks and fan.

# Connections

## Before Connection

**Caution**

- Before making connections, disconnect the ground terminal of the car battery to avoid short circuits.
- Connect the power input lead only after all other leads have been connected.
- **Be sure to connect the ground wire of the unit securely to a metal point of the car. A loose connection may cause a malfunction of the amplifier.**
- To avoid impairing sound by noises, keep the power input lead away from the phono input or output cord of the car stereo, or from the car stereo itself.

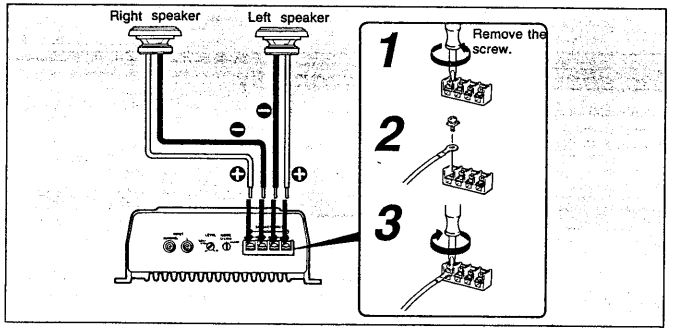
**Notes**

- The ground wire and the power input lead are not supplied with your models. When connecting to the battery, connect the fusible link (60 A) between the power input lead and the ⊕ terminal of the battery, or use the power input lead equipped with the fusible link (60 A).
- When connecting to GND and ⊕ terminal of the 12 V battery, be sure to use a cable whose sectional area is equal to or greater than 8 mm², and whose thickness is equal to or greater than 8 gauge.
- To avoid a short circuit or high temperature, when connecting to the jacks, use the compressed jacks on the board.
- When connecting to ⊕ terminal of the 12 V battery and + side of the car battery, be sure to use a 60 A fuse near the battery to avoid a short circuit.

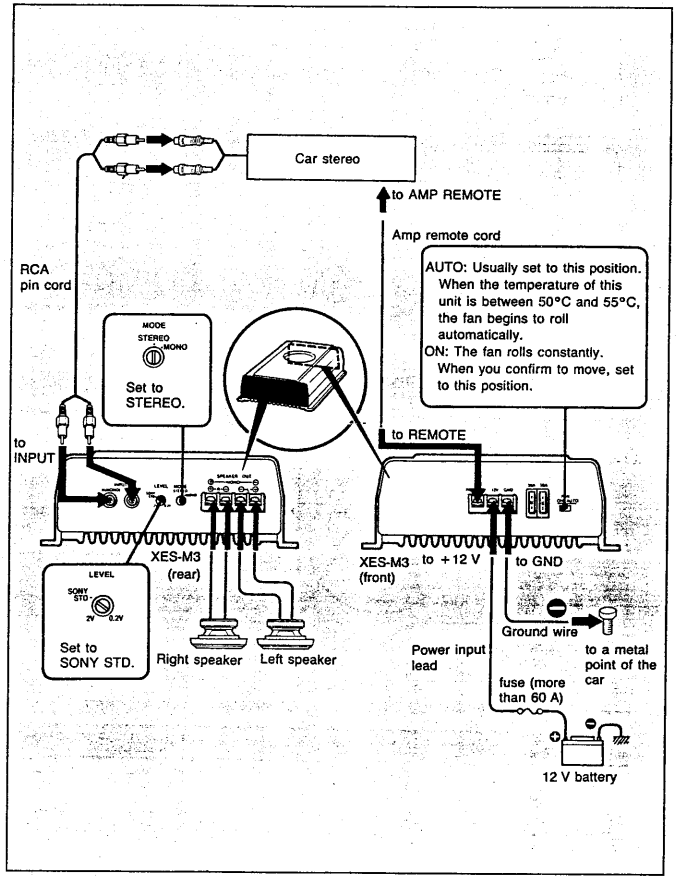
## Speaker Connection

**Caution**

- Do not connect the ⊖ terminal of the speaker system with the car chassis, and do not connect the ⊖ terminal of the right speaker with that of the left speaker.

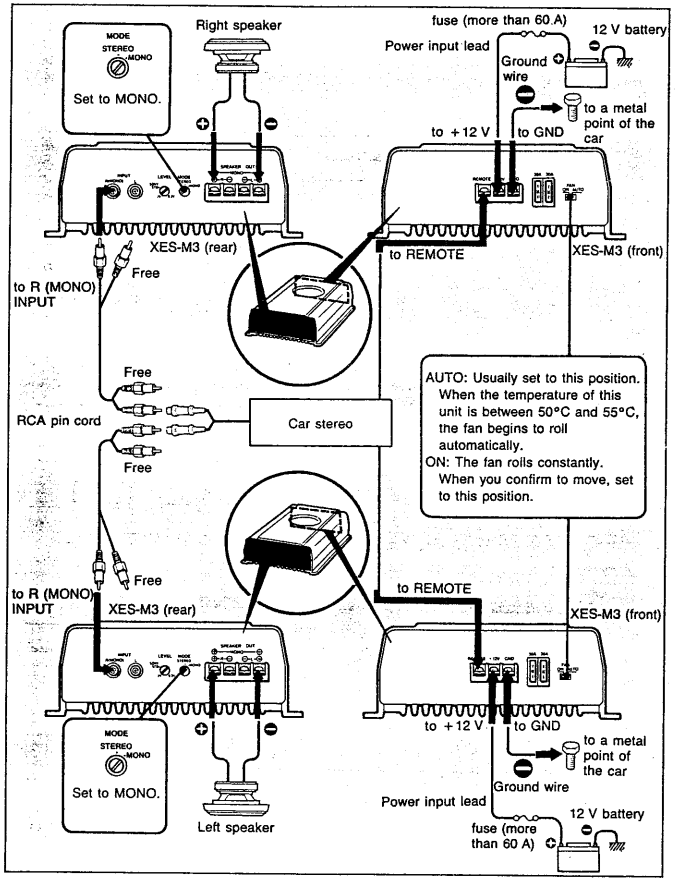



## Connection of 2-speaker System



# Connections

## Using the XES-M3 as a Monaural Amplifier

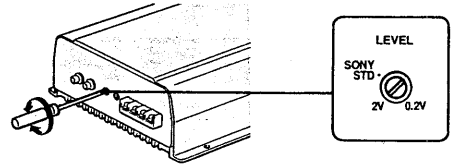

Right speaker
fuse (more than 60 A)
12 V battery
Power input lead
Ground wire
to a metal point of the car
to +12 V
to GND
MODE
STEREO
MONO
Set to MONO.
XES-M3 (rear)
XES-M3 (front)
to REMOTE
Free
to R (MONO) INPUT
RCA pin cord
Car stereo
AUTO: Usually set to this position. When the temperature of this unit is between 50°C and 55°C, the fan begins to roll automatically.
ON: The fan rolls constantly. When you confirm to move, set to this position.
Left speaker

## Input Level Adjustment

When using source equipment of manufactures other than Sony, adjust the input level as necessary by turning the input level control with a screw driver.

Be sure to set the control to the SONY STD (standard) position when using a Sony product.

To raise input level, set the control to 2 V position.
To lower input level, set the control to 0.2 V.



# SECTION 2
# ADJUSTMENTS

( ) : R ch

**Note :**

Wait until the voltage changing calms down after adjusting the volumes because of they have the hysteresis characteristics by the thermal change.

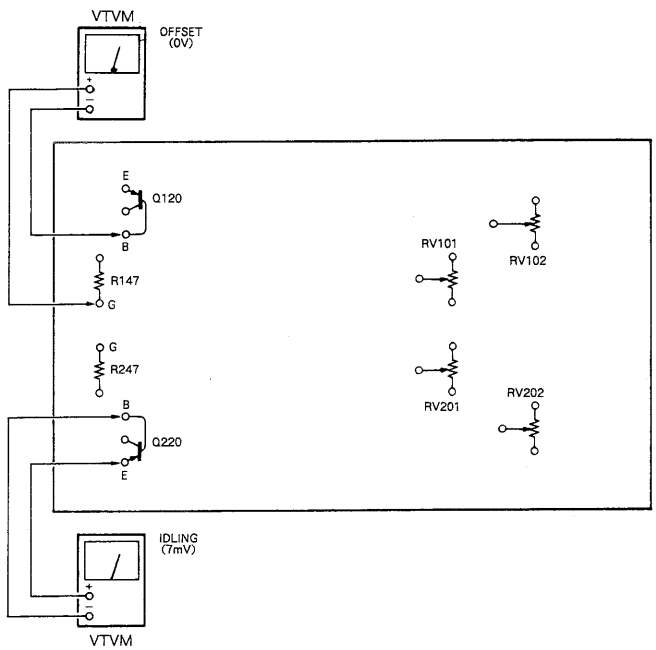
**[Offset Adjustment]**

Adjust with RV101 (RV201) so that the voltage between the base of Q120 (Q220) and the signal ground becomes 0V dc.

**[Idling Current Adjustment]**

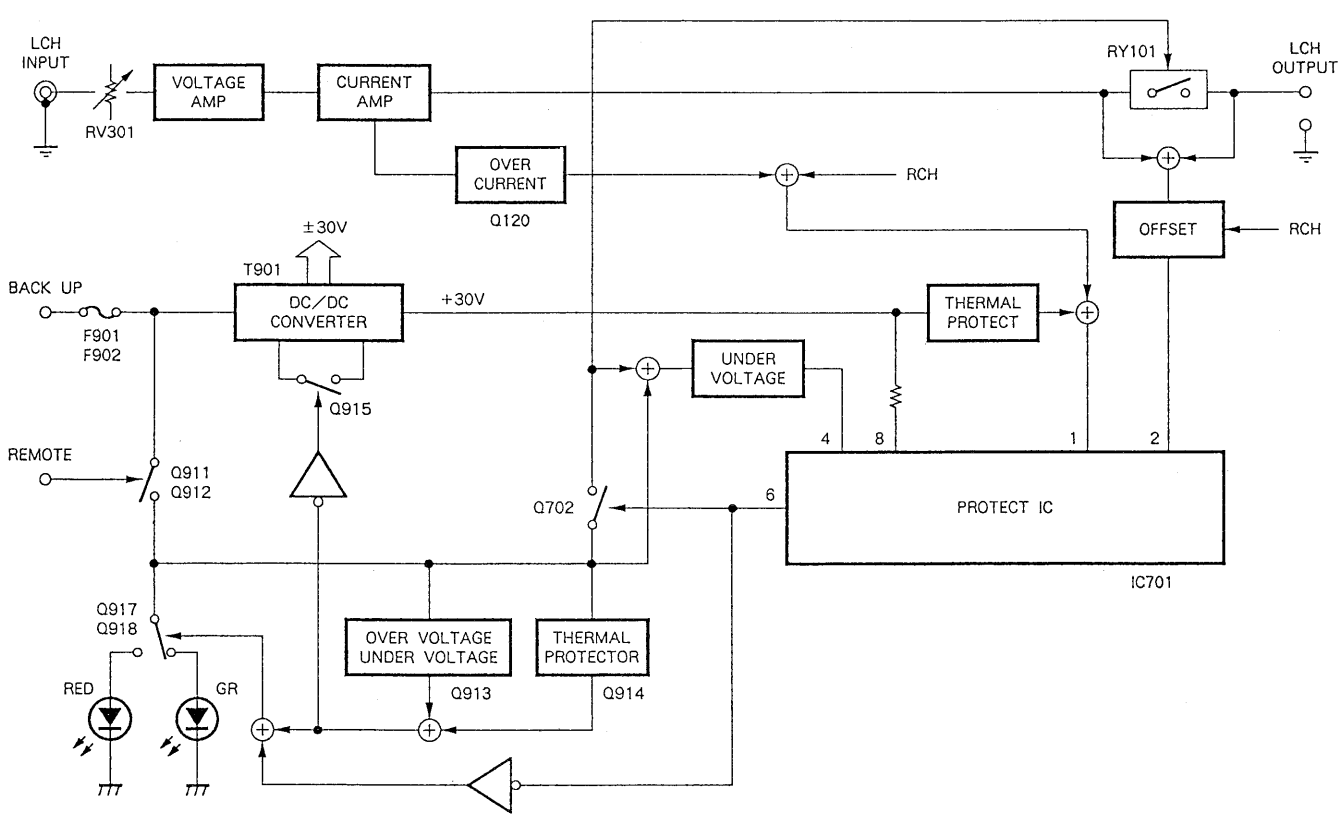
Adjust with RV102 (RV202) so that the voltage between the emitter and the base of Q120 (Q220) becomes 7mV dc.

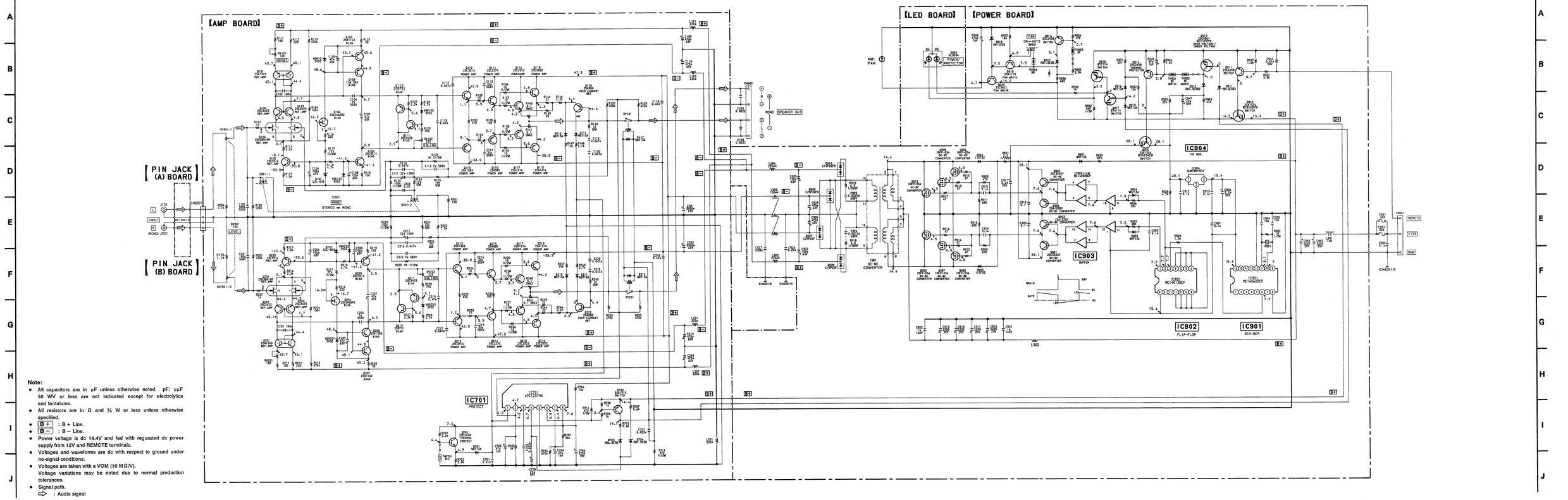
**Location:**




# SECTION 3
# DIAGRAMS

## 3-1. BLOCK DIAGRAM






Note:

- All capacitors are in μF unless otherwise noted. pF: μμF 50 WV or less are not indicated except for electrolytics and tantalums.
- All resistors are in Ω and ¼ W or less unless otherwise specified.
- B+ : B+ Line.
- B− : B− Line.
- Power voltage is dc 14.4V and fed with regurated dc power supply from 12V and REMOTE terminals.
- Voltages and waveforms are dc with respect to ground under no-signal conditions.
- Voltages are taken with a VOM (10 MΩ/V). Voltage variations may be noted due to normal production tolerances.
- Signal path.
  ⇨ : Audio signal

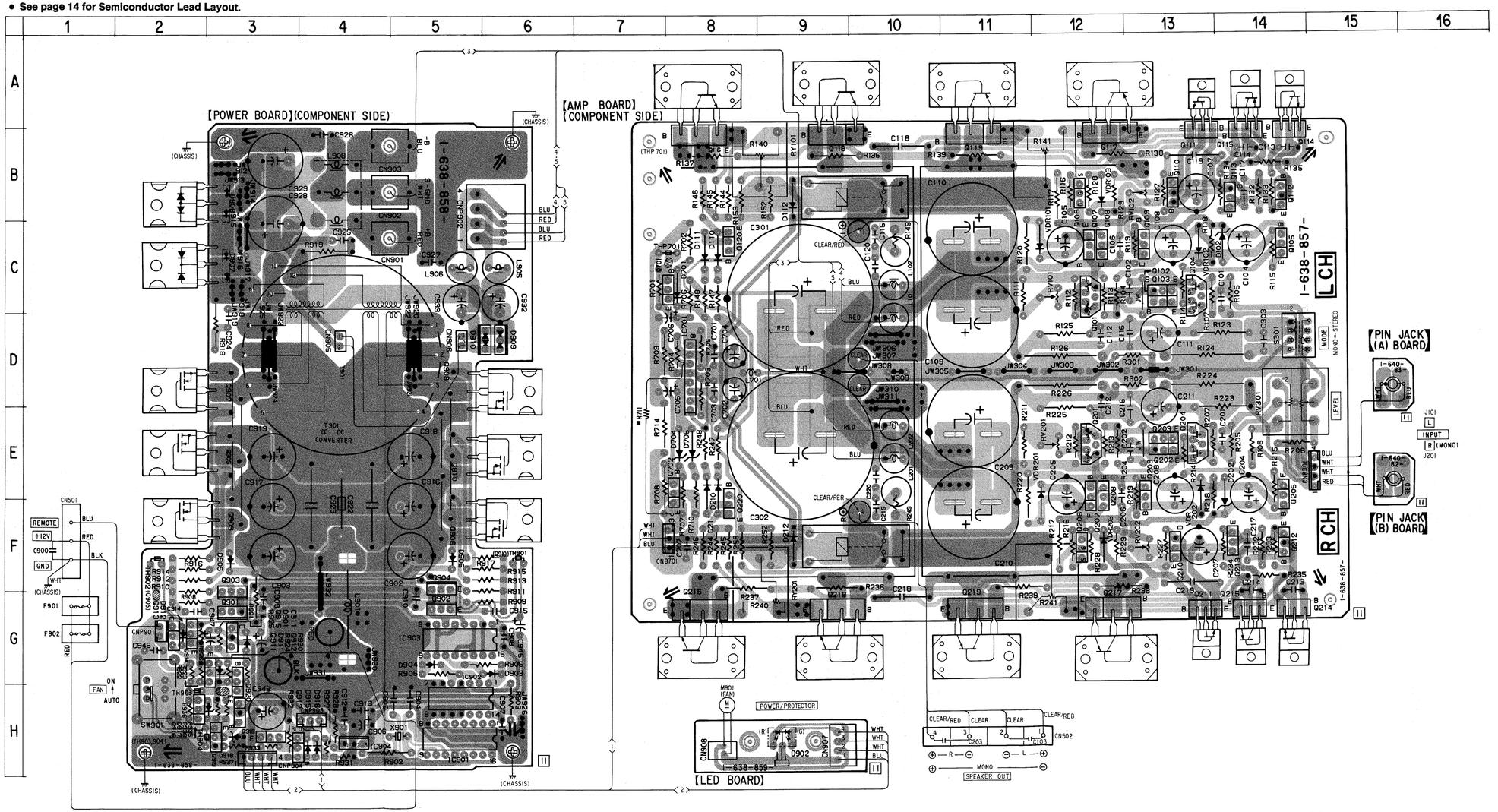
### 3-3. PRINTED WIRING BOARDS

• See page 14 for Semiconductor Lead Layout.

• Semiconductor Location

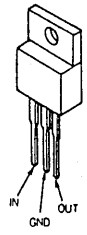
| Ref. No. | Location | Ref. No. | Location |
|---|---|---|---|
| D102 | C-14 | Q115 | B-14 |
| D110 | C-8 | Q116 | B-8 |
| D111 | C-8 | Q117 | B-12 |
| D112 | B-9 | Q118 | B-9 |
| D202 | F-14 | Q119 | B-11 |
| D210 | E-8 | Q120 | C-8 |
| D211 | E-8 | Q201 | E-12 |
| D212 | F-9 | Q202 | E-13 |
| D701 | C-8 | Q203 | E-13 |
| D704 | E-8 | Q204 | E-13 |
| D705 | E-8 | Q205 | F-14 |
| D901 | G-3 | Q206 | F-12 |
| D902 | H-9 | Q207 | E-12 |
| D903 | G-6 | Q208 | E-12 |
| D904 | G-5 | Q209 | E-13 |
| D905 | F-3 | Q210 | F-13 |
| D906 | F-5 | Q211 | G-13 |
| D907 | C-3 | Q212 | F-14 |
| D908 | B-3 | Q213 | F-14 |
| D909 | D-6 | Q214 | G-14 |
| D910 | D-6 | Q215 | G-14 |
| D911 | G-3 | Q216 | G-7 |
| D912 | G-2 | Q217 | G-12 |
| D915 | H-4 | Q218 | G-9 |
| D916 | H-4 | Q219 | G-11 |
| D917 | H-2 | Q220 | F-8 |
| D918 | H-3 | Q701 | C-8 |
| | | Q702 | E-8 |
| IC701 | D-8 | Q901 | G-3 |
| IC901 | H-5 | Q902 | G-5 |
| IC902 | H-5 | Q903 | F-3 |
| IC903 | G-5 | Q904 | F-5 |
| IC904 | H-4 | Q905 | E-3 |
| | | Q906 | F-5 |
| Q101 | C-12 | Q907 | D-3 |
| Q102 | C-13 | Q908 | D-5 |
| Q103 | C-13 | Q909 | F-3 |
| Q104 | C-13 | Q910 | E-5 |
| Q105 | C-14 | Q911 | G-3 |
| Q106 | B-12 | Q912 | G-3 |
| Q107 | C-12 | Q913 | G-2 |
| Q108 | C-12 | Q914 | G-2 |
| Q109 | C-13 | Q915 | G-3 |
| Q110 | B-13 | Q916 | H-2 |
| Q111 | B-13 | Q917 | H-4 |
| Q112 | B-14 | Q918 | H-3 |
| Q113 | B-14 | Q919 | H-3 |
| Q114 | B-14 | Q920 | H-3 |

Note:
- ○—— : parts extracted from the component side.
- ● : Through hole.
- ▒▒ : Pattern on the side which is seen.
- ▒▒ : Pattern of the rear side.

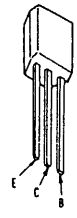


## • Semiconductor Lead Layouts

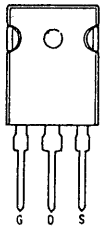
**RC78M15FA**



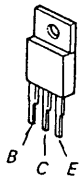

**DTA114YS**
**DTA124ES**
**DTC114YS**
**2SA1175-FEK**
**2SA1524**
**2SC2458-YGR**
**2SC3864**
**2SD1758-F5QR**



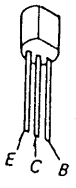

**IRFP054**



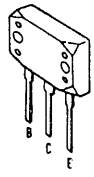

**2SA985A**
**2SA1329-O**
**2SA1383**
**2SC2275A**
**2SC3346-O**
**2SC3514-Q**



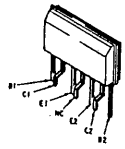

**2SA988-PAFAEA**



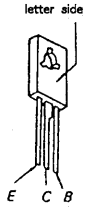

**2SA1216-Y**
**2SC2922-Y**




**2SA1349-GRBL**

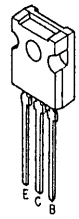


**2SA1407**
**2SB731**

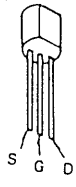



**2SB984-K**

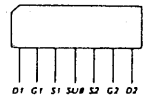
**2SC3423**



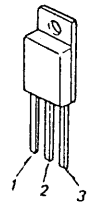

**2SK246-GR2**



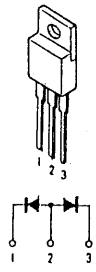

**2SK389-GR**



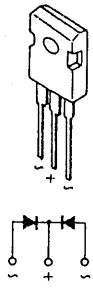

**C10P20FU**



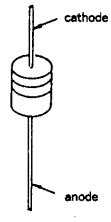

**C10P20FUR**



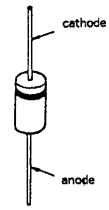

**C25P20F**
**C25P20FR**



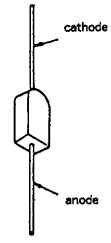

**HZS6C3L**
**RD12ES-B2**
**RD16ES-B3**
**RD6.8ES-B2**
**RD7.5ES-B2**
**1SS119**



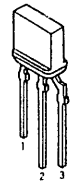

**HZS2CLL**
**11EFS2**




**SV-02**
**SV-03**



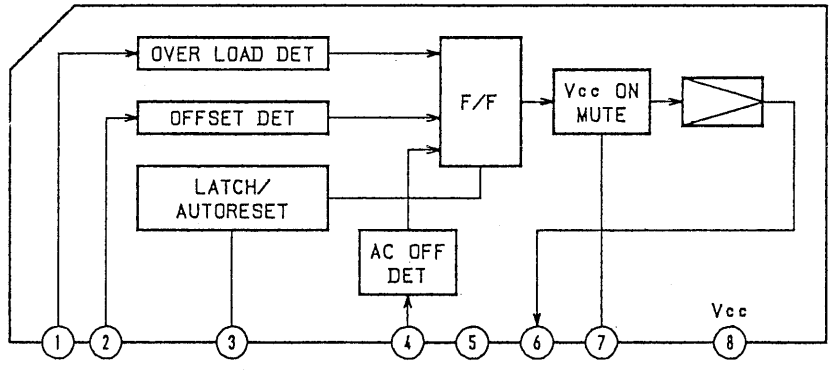

**GL9ED4**



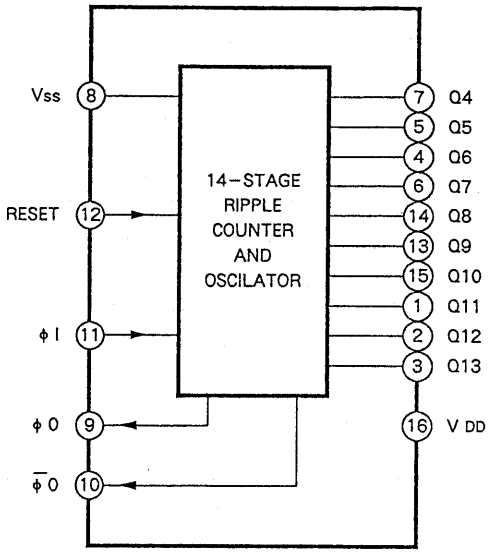

1:Anode Yellow green
2:Cathode Comon
3:Anode Red

## • IC Block Diagrams

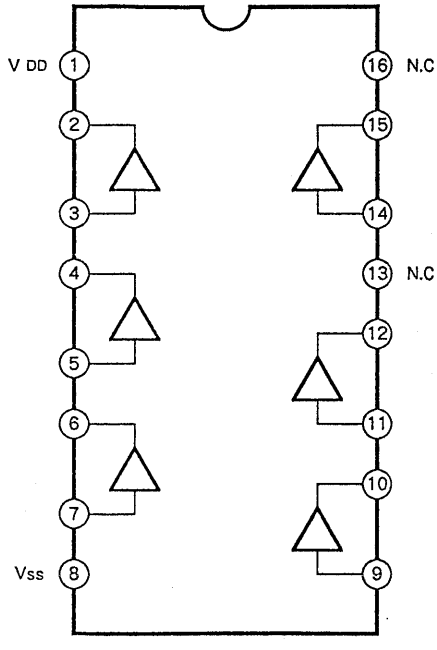
### IC701 μPC1237HA



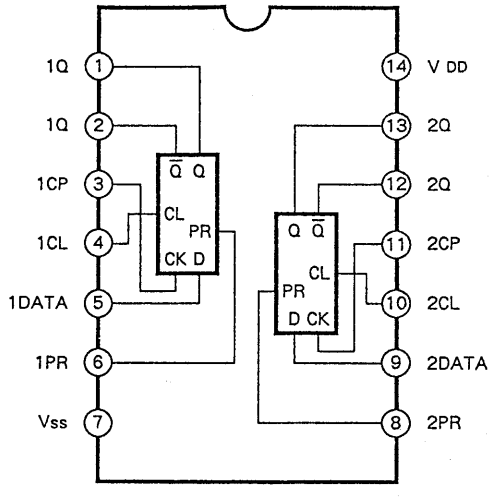

### IC901 MC14060BCP




### IC903 MC14050BCP




### IC902 MC14013BCP

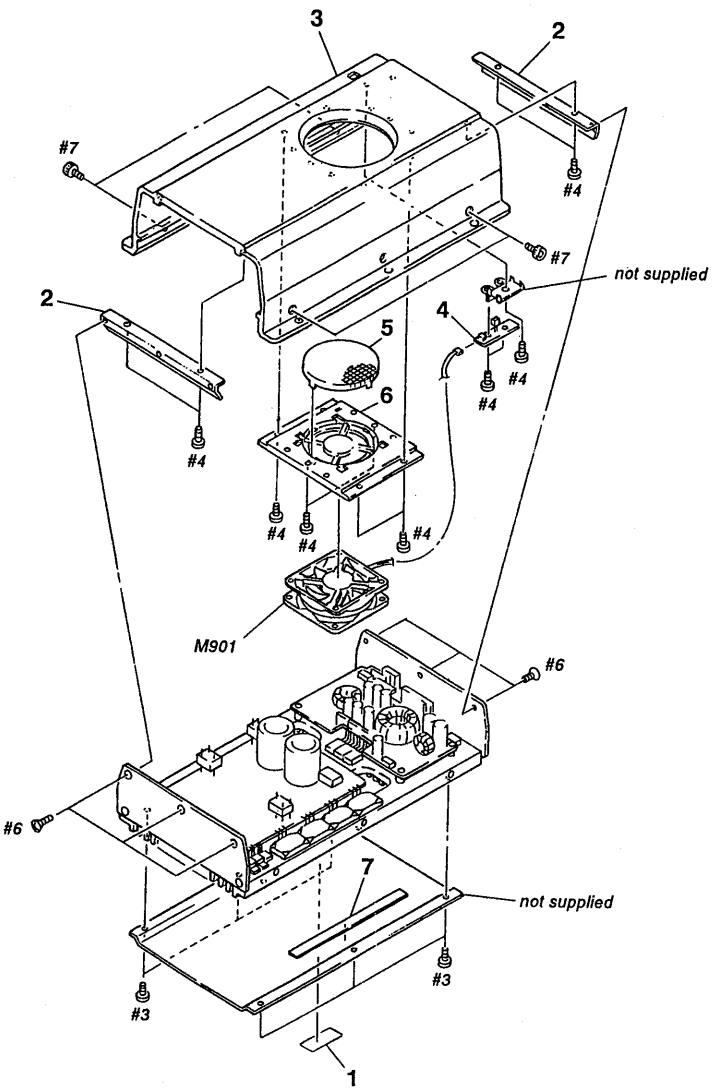


# SECTION 4
# EXPLODED VIEWS

**NOTE:**

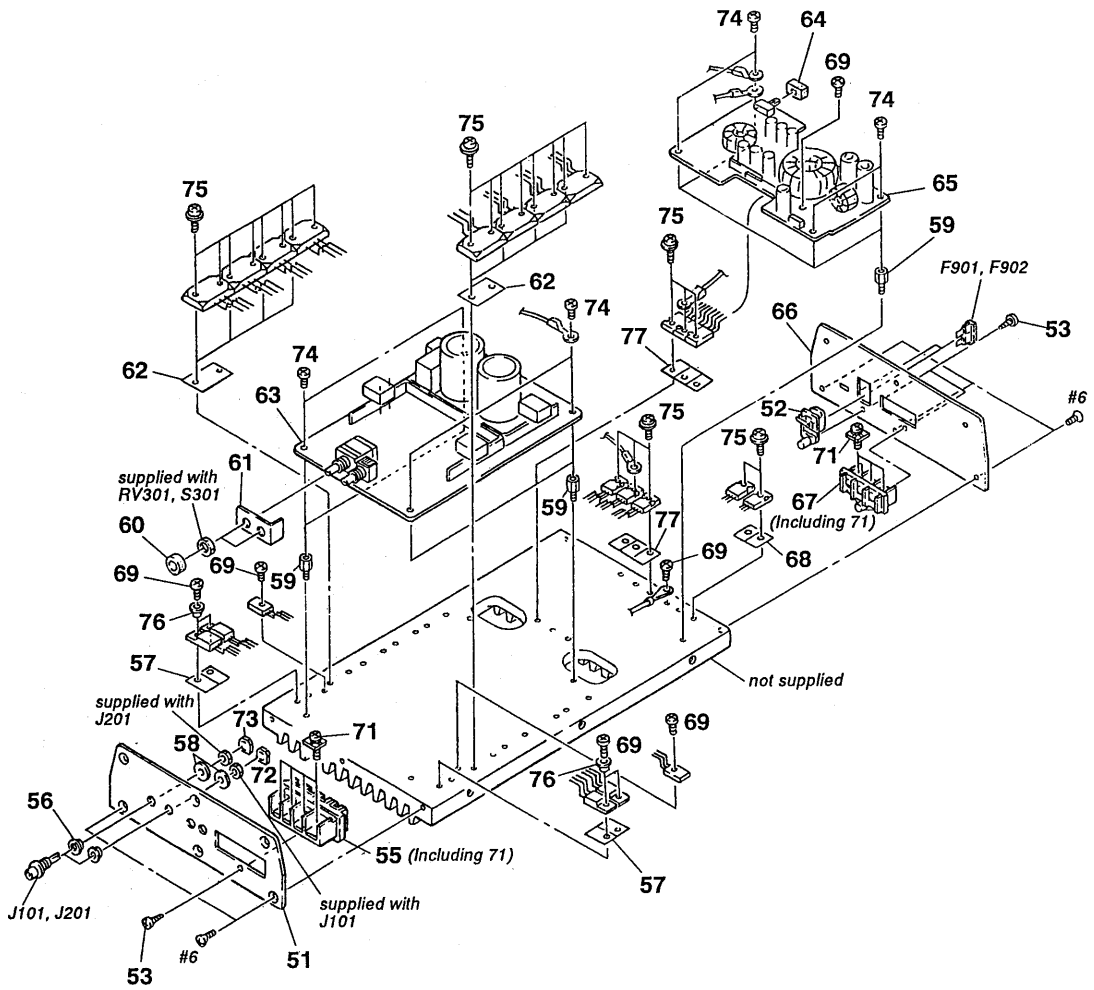
- -XX and -X mean standardized parts, so they may have some difference from the original one.
- Color Indication of Appearance Parts
  Example:
  KNOB, BALANCE (WHITE) . . . (RED)
  ↑ ↑
  Parts Color Cabinet's Color
- Items marked "*" are not stocked since they are seldom required for routine service. Some delay should be anticipated when ordering these items.
- The mechanical parts with no reference number in the exploded views are not supplied.
- Hardware (# mark) list is given in the last of this parts list.

## (1) CABINET SECTION




| Ref. No. | Part No. | Description | Remark |
|---|---|---|---|
| 1 | * 3-367-174-01 | LABEL, MODEL NUMBER (U) (US/CND, AEP/UK, E) | |
| | * 3-367-176-02 | LABEL, MODEL NUMBER (GERMANY) | |
| 2 | * 3-366-812-01 | BRACKET (SIDE PANEL) | |
| 3 | 3-366-803-01 | HEAT SINK | |
| 4 | * 1-638-859-11 | LED BOARD | |
| 5 | * 3-366-811-01 | PANEL | |
| 6 | 3-366-805-01 | GRILLE | |
| 7 | * 3-369-434-01 | ABSORBENT (A), VIBRATION | |
| M901 | 1-541-839-11 | MOTOR | |

## (2) CHASSIS SECTION




| Ref. No. | Part No. | Description | Remark |
|---|---|---|---|
| 51 | 3-366-806-01 | PANEL (FRONT) | |
| 52 | 1-533-245-11 | HOLDER, FUSE | |
| 53 | 3-367-411-01 | SCREW (3X10), +PTP | |
| 54 | 3-366-821-11 | BUSHING (WHITE) | |
| 55 | 1-537-349-11 | TEMMINAL BOARD (4P) (SP OUT) | |
| 56 | 3-366-821-01 | BUSHING (RED) | |
| 57 | 3-366-818-01 | SHEET (B2), INSULATING | |
| 58 | 3-366-820-01 | SHEET (D), INSULATING | |
| 59 | * 3-366-810-01 | SHAFT | |
| 60 | 3-366-815-01 | CUSHION (V) | |
| 61 | * 3-366-809-01 | PLATE (VOLUME), SHIELD | |
| 62 | 3-366-817-01 | SHEET (A), INSULATING | |
| 63 | * A-3273-421-A | AMP BOARD, COMPLETE | |
| 64 | 3-366-814-01 | CUSHION (S) | |
| 65 | * A-3273-422-A | POWER BOARD, COMPLETE | |
| 66 | 3-366-807-01 | PANEL (REAR) | |

| Ref. No. | Part No. | Description | Remark |
|---|---|---|---|
| 67 | 1-537-348-11 | TERMINAL BOARD (3P) (REMOTE/+12V/GND) | |
| 68 | 3-366-819-01 | SHEET (C2), INSULATING | |
| 69 | 7-682-147-15 | SCREW, TR | |
| 70 | 7-682-149-15 | SCREW, TR | |
| 71 | 3-369-647-01 | SCREW (WITH SPACER) M4 | |
| 72 | * 1-640-180-11 | PC BOARD, PIN (L) | |
| 73 | * 1-640-181-11 | PC BOARD, PIN (R) | |
| 74 | 7-682-548-09 | SCREW (3X8) | |
| 75 | X-3363-345-1 | SCREW ASSY, +BV (M3X12) | |
| 76 | 2-371-561-00 | BUSHING (P), INSULATING | |
| 77 | 3-366-819-01 | SHEET (C3), INSULATING | |
| F901 | 1-532-947-11 | FUSE (BRADE TYPE) (AUTO FUSE) (30A) | |
| F902 | 1-532-947-11 | FUSE (BRADE TYPE) (AUTO FUSE) (30A) | |
| J101 | 1-573-057-11 | JACK, PIN 1P (INPUT/L) | |
| J201 | 1-573-057-11 | JACK, PIN 1P (INPUT/R) | |

AMP

# SECTION 5
# ELECTRICAL PARTS LIST

**NOTE:**

- Due to standardization, replacements in the parts list may be different from the parts specified in the diagrams or the components used on the set.
- -XX and -X mean standardized parts, so they may have some difference from the original one.
- RESISTORS
  All resistors are in ohms.
  METAL: Metal-film resistor
  METAL OXIDE: Metal Oxide-film resistor
  F: nonflammable
- Items marked "*" are not stocked since they are seldom required for routine service. Some delay should be anticipated when ordering these items.
- SEMICONDUCTORS
  In each case, u: μ, for example:
  uA...: μA..., uPA...: μPA...,
  uPB...: μPB..., uPC...: μPC...,
  uPD...: μPD...
- CAPACITORS
  uF: μF
- COILS
  uH: μH

When including parts by reference number, please include the board name.

| Ref. No. | Part No. | Description | | | Remark |
|---|---|---|---|---|---|
| | * A-3273-421-A | AMP BOARD, COMPLETE | | | |
| | | ********** | | | |
| | * 3-366-809-01 | PLATE (VOLUME), SHIELD | | | |
| | | < CAPACITOR > | | | |
| C101 | 1-109-619-00 | MICA | 180PF | 1% | 500V |
| C102 | 1-109-619-00 | MICA | 180PF | 1% | 500V |
| C104 | 1-124-130-00 | ELECT | 100uF | 20% | 63V |
| C105 | 1-124-918-11 | ELECT | 47uF | 20% | 63V |
| C106 | 1-107-048-00 | MICA | 6.8PF | | 500V |
| C107 | 1-124-918-11 | ELECT | 47uF | 20% | 63V |
| C108 | 1-124-130-00 | ELECT | 100uF | 20% | 63V |
| C109 | 1-125-669-11 | ELECT (BLOCK) | 470uF | 20% | 63V |
| C110 | 1-125-669-11 | ELECT (BLOCK) | 470uF | 20% | 63V |
| C111 | 1-124-748-11 | ELECT | 22uF | 20% | 100V |
| C112 | 1-107-048-00 | MICA | 6.8PF | | 500V |
| C113 | 1-107-159-00 | MICA | 33PF | 5% | 500V |
| C114 | 1-107-159-00 | MICA | 33PF | 5% | 500V |
| C115 | 1-136-161-00 | FILM | 0.047uF | 5% | 50V |
| C116 | 1-136-961-11 | FILM | 0.047uF | 10% | 160V |
| C117 | 1-136-961-11 | FILM | 0.047uF | 10% | 160V |
| C118 | 1-136-962-11 | FILM | 0.47uF | 10% | 160V |
| C119 | 1-136-962-11 | FILM | 0.47uF | 10% | 160V |
| C120 | 1-136-161-00 | FILM | 0.047uF | 5% | 50V |
| C201 | 1-109-619-00 | MICA | 180PF | 1% | 500V |
| C202 | 1-109-619-00 | MICA | 180PF | 1% | 500V |
| C204 | 1-124-130-00 | ELECT | 100uF | 20% | 63V |
| C205 | 1-124-918-11 | ELECT | 47uF | 20% | 63V |
| C206 | 1-107-048-00 | MICA | 6.8PF | | 500V |
| C207 | 1-124-918-11 | ELECT | 47uF | 20% | 63V |
| C208 | 1-124-130-00 | ELECT | 100uF | 20% | 63V |
| C209 | 1-125-669-11 | ELECT (BLOCK) | 470uF | 20% | 63V |
| C210 | 1-125-669-11 | ELECT (BLOCK) | 470uF | 20% | 63V |
| C211 | 1-124-748-11 | ELECT | 22uF | 20% | 100V |
| C212 | 1-107-048-00 | MICA | 6.8PF | | 500V |
| C213 | 1-107-159-00 | MICA | 33PF | 5% | 500V |
| C214 | 1-107-159-00 | MICA | 33PF | 5% | 500V |
| C215 | 1-136-161-00 | FILM | 0.047uF | 5% | 50V |
| C216 | 1-136-961-11 | FILM | 0.047uF | 10% | 160V |
| C217 | 1-136-961-11 | FILM | 0.047uF | 10% | 160V |
| C218 | 1-136-962-11 | FILM | 0.47uF | 10% | 160V |
| C219 | 1-136-962-11 | FILM | 0.47uF | 10% | 160V |
| C220 | 1-136-161-00 | FILM | 0.047uF | 5% | 50V |
| C301 | 1-125-670-11 | ELECT (BLOCK) | 3900uF | 20% | 63V |
| C302 | 1-125-670-11 | ELECT (BLOCK) | 3900uF | 20% | 63V |
| C303 | 1-136-153-00 | FILM | 0.01uF | 5% | 50V |
| C701 | 1-136-153-00 | FILM | 0.01uF | 5% | 50V |
| C702 | 1-123-332-00 | ELECT | 47uF | 20% | 25V |
| C703 | 1-136-157-00 | FILM | 0.022uF | 5% | 50V |
| C704 | 1-123-332-00 | ELECT | 47uF | 20% | 25V |
| C705 | 1-123-357-00 | FILM | 22uF | 20% | 50V |
| C706 | 1-126-335-11 | FILM | 220uF | 20% | 10V |
| C707 | 1-136-157-00 | FILM | 0.022uF | 5% | 50V |
| | | < CONNECTOR > | | | |
| CNB301 | * 1-569-975-11 | PIN, CONNECTOR (PC BOARD) 4P | | | |
| CNB701 | * 1-569-974-11 | PIN, CONNECTOR (PC BOARD) 3P | | | |
| | | < DIODE > | | | |
| D102 | 8-719-933-41 | DIODE | HZS6C3L | | |
| D110 | 8-719-911-19 | DIODE | 1SS119 | | |
| D111 | 8-719-911-19 | DIODE | 1SS119 | | |
| D112 | 8-719-911-19 | DIODE | 1SS119 | | |
| D202 | 8-719-933-41 | DIODE | HZS6C3L | | |
| D210 | 8-719-911-19 | DIODE | 1SS119 | | |
| D211 | 8-719-911-19 | DIODE | 1SS119 | | |

| Ref. No. | Part No. | Description | Remark |
|---|---|---|---|
| D212 | 8-719-911-19 | DIODE 1SS119 | |
| D701 | 8-719-911-19 | DIODE 1SS119 | |
| D704 | 8-719-110-03 | DIODE RD7.5ES-B2 | |
| D705 | 8-719-109-97 | DIODE RD6.8ES-B2 | |
| | | < IC > | |
| IC701 | 8-759-111-68 | IC uPC1237HA | |
| | | < JUMPER WIRE > | |
| JW301 | * 1-535-303-00 | WIRE, JUMPER | |
| | | < COIL > | |
| L101 | * 1-424-542-11 | INDUCTOR 220uH | |
| L102 | * 1-424-542-11 | INDUCTOR 220uH | |
| L201 | * 1-424-542-11 | INDUCTOR 220uH | |
| L202 | * 1-424-542-11 | INDUCTOR 220uH | |
| L701 | 1-424-510-11 | INDUCTOR 220uH | |
| | | < TRANSISTOR > | |
| Q101 | 8-729-232-00 | TRANSISTOR 2SA1349-GRBL | |
| Q102 | 8-729-203-45 | TRANSISTOR 2SC3423 | |
| Q103 | 8-729-203-45 | TRANSISTOR 2SC3423 | |
| Q104 | 8-729-203-21 | TRANSISTOR 2SK389-GR | |
| Q105 | 8-729-104-18 | TRANSISTOR 2SC3514-Q | |
| Q106 | 8-729-201-56 | TRANSISTOR 2SK246GR2 | |
| Q107 | 8-729-802-71 | TRANSISTOR 2SA1407 | |
| Q108 | 8-729-104-91 | TRANSISTOR 2SA1383 | |
| Q109 | 8-729-104-18 | TRANSISTOR 2SC3514-Q | |
| Q110 | 8-729-173-13 | TRANSISTOR 2SB731 | |
| Q111 | 8-729-203-45 | TRANSISTOR 2SC3423 | |
| Q112 | 8-729-104-18 | TRANSISTOR 2SC3514-Q | |
| Q113 | 8-729-104-91 | TRANSISTOR 2SA1383 | |
| Q114 | 8-729-107-53 | TRANSISTOR 2SC2275A | |
| Q115 | 8-729-190-53 | TRANSISTOR 2SA985A | |
| Q116 | 8-729-300-12 | TRANSISTOR 2SC2922-Y | |
| Q117 | 8-729-300-39 | TRANSISTOR 2SA1216-Y | |
| Q118 | 8-729-300-12 | TRANSISTOR 2SC2922-Y | |
| Q119 | 8-729-300-39 | TRANSISTOR 2SA1216-Y | |
| Q120 | 8-729-108-14 | TRANSISTOR 2SA988-PAFAEA | |
| Q201 | 8-729-232-00 | TRANSISTOR 2SA1349-GRBL | |
| Q202 | 8-729-203-45 | TRANSISTOR 2SC3423 | |
| Q203 | 8-729-203-45 | TRANSISTOR 2SC3423 | |
| Q204 | 8-729-203-21 | TRANSISTOR 2SK389-GR | |
| Q205 | 8-729-104-18 | TRANSISTOR 2SC3514-Q | |
| Q206 | 8-729-201-56 | TRANSISTOR 2SK246GR2 | |
| Q207 | 8-729-802-71 | TRANSISTOR 2SA1407 | |
| Q208 | 8-729-104-91 | TRANSISTOR 2SA1383 | |
| Q209 | 8-729-104-18 | TRANSISTOR 2SC3514-Q | |
| Q210 | 8-729-173-13 | TRANSISTOR 2SB731 | |
| Q211 | 8-729-203-45 | TRANSISTOR 2SC3423 | |
| Q212 | 8-729-104-18 | TRANSISTOR 2SC3514-Q | |
| Q213 | 8-729-104-91 | TRANSISTOR 2SA1383 | |
| Q214 | 8-729-107-53 | TRANSISTOR 2SC2275A | |
| Q215 | 8-729-190-53 | TRANSISTOR 2SA985A | |
| Q216 | 8-729-300-12 | TRANSISTOR 2SC2922-Y | |
| Q217 | 8-729-300-39 | TRANSISTOR 2SA1216-Y | |
| Q218 | 8-729-300-12 | TRANSISTOR 2SC2922-Y | |
| Q219 | 8-729-300-39 | TRANSISTOR 2SA1216-Y | |
| Q220 | 8-729-108-14 | TRANSISTOR 2SA988-PAFAEA | |
| Q701 | 8-729-230-45 | TRANSISTOR 2SC2458-YGR | |
| Q702 | 8-729-111-52 | TRANSISTOR 2SB984-K | |
| | | < RESISTOR > | |
| R104 | 1-249-604-11 | CARBON 150K 5% 1/4W | |
| R105 | 1-249-469-11 | CARBON 100K 5% 1/4W | |
| R106 | 1-249-553-11 | CARBON 1.1K 5% 1/4W | |
| R107 | 1-247-713-11 | CARBON 1K 5% 1/4W | |
| R111 | 1-247-703-11 | CARBON 180 5% 1/4W | |
| R112 | 1-247-704-11 | CARBON 220 5% 1/4W | |
| R113 | 1-249-616-11 | CARBON 470K 5% 1/4W | |
| R114 | 1-247-717-11 | CARBON 2.2K 5% 1/4W | |
| R115 | 1-249-556-11 | CARBON 1.5K 5% 1/4W | |
| R116 | 1-247-704-11 | CARBON 220 5% 1/4W | |
| R117 | 1-249-490-11 | CARBON 27K 5% 1/2W | |
| R118 | 1-247-721-11 | CARBON 4.7K 5% 1/4W | |
| R119 | 1-247-700-11 | CARBON 100 5% 1/4W | |
| R120 | 1-249-637-11 | CARBON 33 5% 1/2W | |
| R123 | 1-249-721-11 | CARBON 100K 5% 1/2W | |
| R124 | 1-259-775-11 | CARBON 120 2% 2W | |
| R125 | 1-214-937-00 | CARBON 1.0M 5% 1/2W | |
| R126 | 1-259-825-11 | CARBON 15K 2% 2W | |
| R127 | 1-247-717-11 | CARBON 2.2K 5% 1/4W | |
| R128 | 1-247-718-11 | CARBON 2.7K 5% 1/4W | |
| R129 | 1-249-549-11 | CARBON 750 5% 1/4W | |
| R132 | 1-247-714-11 | CARBON 470 5% 1/4W | |
| R133 | 1-249-504-11 | CARBON 10 5% 1/4W | |
| R134 | 1-249-504-11 | CARBON 10 5% 1/4W | |
| R135 | 1-247-700-11 | CARBON 100 5% 1/4W | |
| R136 | 1-247-727-11 | CARBON 10 5% 1/2W | |
| R137 | 1-247-727-11 | CARBON 10 5% 1/2W | |
| R138 | 1-247-727-11 | CARBON 10 5% 1/2W | |
| R139 | 1-247-727-11 | CARBON 10 5% 1/2W | |
| R140 | 1-205-980-11 | WIREWOUND 0.1 5% 5W | |
| R141 | 1-205-980-11 | WIREWOUND 0.1 5% 5W | |
| R144 | 1-249-512-11 | CARBON 22 5% 1/4W | |
| R145 | 1-249-512-11 | CARBON 22 5% 1/4W | |
| R146 | 1-247-717-11 | CARBON 2.2K 5% 1/4W | |
| R147 | 1-249-460-11 | CARBON 15K 5% 1/4W | |

AMP LED

| Ref. No. | Part No. | Description | | | Remark |
|---|---|---|---|---|---|
| R148 | 1-247-718-11 | CARBON | 2.7K | 5% | 1/4W |
| R149 | 1-259-749-11 | CARBON | 10 | 2% | 2W |
| R152 | 1-249-616-11 | CARBON | 470K | 5% | 1/4W |
| R153 | 1-249-616-11 | CARBON | 470K | 5% | 1/4W |
| R204 | 1-249-604-11 | CARBON | 150K | 5% | 1/4W |
| R205 | 1-249-469-11 | CARBON | 100K | 5% | 1/4W |
| R206 | 1-249-553-11 | CARBON | 1.1K | 5% | 1/4W |
| R207 | 1-247-713-11 | CARBON | 1K | 5% | 1/4W |
| R211 | 1-247-703-11 | CARBON | 180 | 5% | 1/4W |
| R212 | 1-247-704-11 | CARBON | 220 | 5% | 1/4W |
| R213 | 1-249-616-11 | CARBON | 470K | 5% | 1/4W |
| R214 | 1-247-717-11 | CARBON | 2.2K | 5% | 1/4W |
| R215 | 1-249-556-11 | CARBON | 1.5K | 5% | 1/4W |
| R216 | 1-247-704-11 | CARBON | 220 | 5% | 1/4W |
| R217 | 1-249-490-11 | CARBON | 27K | 5% | 1/2W |
| R218 | 1-247-721-11 | CARBON | 4.7K | 5% | 1/4W |
| R219 | 1-247-700-11 | CARBON | 100 | 5% | 1/4W |
| R220 | 1-249-637-11 | CARBON | 33 | 5% | 1/2W |
| R223 | 1-249-721-11 | CARBON | 100K | 5% | 1/2W |
| R224 | 1-259-775-11 | CARBON | 120 | 2% | 2W |
| R225 | 1-214-937-00 | CARBON | 1.0M | 5% | 1/2W |
| R226 | 1-259-825-11 | CARBON | 15K | 2% | 2W |
| R227 | 1-247-717-11 | CARBON | 2.2K | 5% | 1/4W |
| R228 | 1-247-718-11 | CARBON | 2.7K | 5% | 1/4W |
| R229 | 1-249-549-11 | CARBON | 750 | 5% | 1/4W |
| R232 | 1-247-714-11 | CARBON | 470 | 5% | 1/4W |
| R233 | 1-249-504-11 | CARBON | 10 | 5% | 1/4W |
| R234 | 1-249-504-11 | CARBON | 10 | 5% | 1/4W |
| R235 | 1-247-700-11 | CARBON | 100 | 5% | 1/4W |
| R236 | 1-247-727-11 | CARBON | 10 | 5% | 1/2W |
| R237 | 1-247-727-11 | CARBON | 10 | 5% | 1/2W |
| R238 | 1-247-727-11 | CARBON | 10 | 5% | 1/2W |
| R239 | 1-247-727-11 | CARBON | 10 | 5% | 1/2W |
| R240 | 1-205-980-11 | WIREWOUND | 0.1 | 5% | 5W |
| R241 | 1-205-980-11 | WIREWOUND | 0.1 | 5% | 5W |
| R244 | 1-249-512-11 | CARBON | 22 | 5% | 1/4W |
| R245 | 1-249-512-11 | CARBON | 22 | 5% | 1/4W |
| R246 | 1-247-717-11 | CARBON | 2.2K | 5% | 1/4W |
| R247 | 1-249-460-11 | CARBON | 15K | 5% | 1/4W |
| R248 | 1-247-718-11 | CARBON | 2.7K | 5% | 1/4W |
| R249 | 1-259-749-11 | CARBON | 10 | 2% | 2W |
| R252 | 1-249-616-11 | CARBON | 470K | 5% | 1/4W |
| R253 | 1-249-616-11 | CARBON | 470K | 5% | 1/4W |
| R301 | 1-247-701-11 | CARBON | 120 | 5% | 1/4W |
| R302 | 1-249-573-11 | CARBON | 7.5K | 5% | 1/4W |
| R701 | 1-247-717-11 | CARBON | 2.2K | 5% | 1/4W |
| R702 | 1-247-720-11 | CARBON | 3.9K | 5% | 1/4W |
| R703 | 1-246-545-00 | CARBON | 1.0M | 5% | 1/4W |
| R704 | 1-249-616-11 | CARBON | 470K | 5% | 1/4W |

| Ref. No. | Part No. | Description | | | Remark |
|---|---|---|---|---|---|
| R705 | 1-249-594-11 | CARBON | 56K | 5% | 1/4W |
| R706 | 1-249-460-11 | CARBON | 15K | 5% | 1/4W |
| R707 | 1-247-722-11 | CARBON | 5.6K | 5% | 1/4W |
| R708 | 1-247-713-11 | CARBON | 1K | 5% | 1/4W |
| R709 | 1-247-713-11 | CARBON | 1K | 5% | 1/4W |
| R710 | 1-247-722-11 | CARBON | 5.6K | 5% | 1/4W |
| R711 | 1-247-747-11 | CARBON | 470 | 5% | 1/2W |
| R714 | 1-247-747-11 | CARBON | 470 | 5% | 1/2W |
| | | < VARIABLE RESISTOR > | | | |
| RV101 | 1-224-247-XX | RES, ADJ, CARBON 100 | | | |
| RV102 | 1-224-550-21 | RES, ADJ, CARBON 220 | | | |
| RV201 | 1-224-247-XX | RES, ADJ, CARBON 100 | | | |
| RV202 | 1-224-550-21 | RES, ADJ, CARBON 220 | | | |
| RV301 | 1-241-416-11 | RES, VAR, CARBON 10K/10K (LEVEL) | | | |
| | | < RELAY > | | | |
| RY101 | 1-515-703-11 | RELAY | | | |
| RY201 | 1-515-703-11 | RELAY | | | |
| | | < SWITCH > | | | |
| S301 | 1-572-663-11 | SWITCH, ROTARY (MODE) | | | |
| | | < THERMISTOR > | | | |
| THP701 | 1-800-427-00 | POSISTOR | | | |
| | | < DIODE > | | | |
| VDR101 | 8-719-300-03 | DIODE SV-03 | | | |
| VDR102 | 8-719-300-02 | DIODE SV-02 | | | |
| VDR103 | 8-719-300-02 | DIODE SV-02 | | | |
| VDR201 | 8-719-300-03 | DIODE SV-03 | | | |
| VDR202 | 8-719-300-02 | DIODE SV-02 | | | |
| VDR203 | 8-719-300-02 | DIODE SV-02 | | | |

**********

* 1-638-859-11 LED BOARD

**********

< CONNECTOR >

CNP907 * 1-564-519-11 PLUG, CONNECTOR 4P
CNP908 * 1-568-940-11 PIN, CONNECTOR 2P

< DIODE >

D902 8-719-989-31 DIODE GL9ED4

**********

| Ref. No. | Part No. | Description | | | Remark |
|---|---|---|---|---|---|
| | * A-3273-422-A | POWER BOARD, COMPLETE | | | |
| | | ********** | | | |
| | 1-543-778-11 | BEAD, FERRITE | | | |
| | | < CAPACITOR > | | | |
| C902 | 1-128-187-11 | ELECT | 2200uF | 20% | 25V |
| C903 | 1-128-187-11 | ELECT | 2200uF | 20% | 25V |
| C904 | 1-107-206-00 | MICA | 15PF | 5% | 500V |
| C905 | 1-107-206-00 | MICA | 15PF | 5% | 500V |
| C906 | 1-123-381-00 | ELECT | 2.2uF | 20% | 100V |
| C907 | 1-162-806-11 | CERAMIC | 0.1uF | 10% | 50V |
| C908 | 1-162-806-11 | CERAMIC | 0.1uF | 10% | 50V |
| C909 | 1-162-806-11 | CERAMIC | 0.1uF | 10% | 50V |
| C910 | 1-162-806-11 | CERAMIC | 0.1uF | 10% | 50V |
| C911 | 1-123-381-00 | ELECT | 2.2uF | 20% | 100V |
| C912 | 1-162-806-11 | CERAMIC | 0.1uF | 20% | 50V |
| C913 | 1-162-806-11 | CERAMIC | 0.1uF | 20% | 50V |
| C914 | 1-162-806-11 | CERAMIC | 0.1uF | 10% | 50V |
| C915 | 1-162-806-11 | CERAMIC | 0.1uF | 10% | 50V |
| C916 | 1-128-187-11 | ELECT | 2200uF | 20% | 25V |
| C917 | 1-128-187-11 | ELECT | 2200uF | 20% | 25V |
| C918 | 1-128-187-11 | ELECT | 2200uF | 20% | 25V |
| C919 | 1-128-187-11 | ELECT | 2200uF | 20% | 25V |
| C922 | 1-137-229-11 | FILM | 1uF | 5% | 160V |
| C923 | 1-137-229-11 | FILM | 1uF | 5% | 160V |
| C924 | 1-136-553-11 | FILM | 0.0015uF | 5% | 630V |
| C925 | 1-136-553-11 | FILM | 0.0015uF | 5% | 630V |
| C926 | 1-136-170-00 | FILM | 0.27uF | 5% | 50V |
| C927 | 1-130-472-00 | FILM | 0.0012uF | 5% | 50V |
| C928 | 1-126-066-11 | ELECT | 470uF | 20% | 63V |
| C929 | 1-126-066-11 | ELECT | 470uF | 20% | 63V |
| C932 | 1-124-130-00 | ELECT | 100uF | 20% | 63V |
| C933 | 1-124-130-00 | ELECT | 100uF | 20% | 63V |
| C945 | 1-124-910-11 | ELECT | 47uF | 20% | 16V |
| C946 | 1-136-153-00 | FILM | 0.01uF | 5% | 50V |
| C947 | 1-126-233-11 | ELECT | 22uF | 20% | 50V |
| C948 | 1-126-103-11 | ELECT | 470uF | 20% | 16V |
| | | < CONNECTOR > | | | |
| CN901 | 4-924-264-01 | TERMINAL, MOUNT | | | |
| CN902 | 4-924-264-01 | TERMINAL, MOUNT | | | |
| CN903 | 4-924-264-01 | TERMINAL, MOUNT | | | |
| | | < CONNECTOR PIN > | | | |
| CNP901 | * 1-569-973-11 | PIN, CONNECTOR (PC BOARD) 2P | | | |
| CNP902 | * 1-564-215-11 | PIN, CONNECTOR 4P | | | |
| CNP903 | * 1-569-974-11 | PIN, CONNECTOR (PC BOARD) 3P | | | |
| CNP904 | * 1-569-975-11 | PIN, CONNECTOR (PC BOARD) 4P | | | |

| Ref. No. | Part No. | Description | Remark |
|---|---|---|---|
| | | < DIODE > | |
| D901 | 8-719-911-19 | DIODE 1SS119 | |
| D903 | 8-719-911-19 | DIODE 1SS119 | |
| D904 | 8-719-911-19 | DIODE 1SS119 | |
| D905 | 8-719-987-67 | DIODE 11EFS2 | |
| D906 | 8-719-987-67 | DIODE 11EFS2 | |
| D907 | 8-719-210-25 | DIODE C25P20F | |
| D908 | 8-719-210-26 | DIODE C25P20FR | |
| D909 | 8-719-200-68 | DIODE C10P20FU | |
| D910 | 8-719-200-69 | DIODE C10P20FUR | |
| D911 | 8-719-110-46 | DIODE RD16ES-B3 | |
| D912 | 8-719-110-03 | DIODE RD7.5ES-B2 | |
| D915 | 8-719-911-19 | DIODE 1SS119 | |
| D916 | 8-719-911-19 | DIODE 1SS119 | |
| D917 | 8-719-110-03 | DIODE RD7.5ES-B2 | |
| D918 | 8-719-110-31 | DIODE RD12ES-B2 | |
| | | < IC > | |
| IC901 | 8-759-031-97 | IC MC14060BCP | |
| IC902 | 8-759-340-13 | IC HD14013BP | |
| IC903 | 8-759-240-50 | IC TC4050BP | |
| IC904 | 8-759-982-36 | IC RC78M15FA | |
| | | < JUMPER WIRE > | |
| JW912 | * 1-535-303-00 | WIRE, JUMPER | |
| | | < COIL > | |
| L901 | 1-424-453-11 | COIL, CHOKE 7MH | |
| L902 | * 3-367-412-01 | PLATE, GROUND | |
| L905 | * 1-424-542-11 | INDUCTOR 220uH | |
| L906 | * 1-424-542-11 | INDUCTOR 220uH | |
| L908 | 1-424-496-11 | COIL, CHOKE 100MH | |
| | | < TRANSISTOR > | |
| Q901 | 8-729-206-08 | TRANSISTOR 2SC3346-O | |
| Q902 | 8-729-206-08 | TRANSISTOR 2SC3346-O | |
| Q903 | 8-729-206-05 | TRANSISTOR 2SA1329-O | |
| Q904 | 8-729-206-05 | TRANSISTOR 2SA1329-O | |
| Q905 | 8-729-710-01 | TRANSISTOR IRFP054 | |
| Q906 | 8-729-710-01 | TRANSISTOR IRFP054 | |
| Q907 | 8-729-710-01 | TRANSISTOR IRFP054 | |
| Q908 | 8-729-710-01 | TRANSISTOR IRFP054 | |
| Q909 | 8-729-710-01 | TRANSISTOR IRFP054 | |
| Q910 | 8-729-710-01 | TRANSISTOR IRFP054 | |
| Q911 | 8-729-230-45 | TRANSISTOR 2SC2458-YGR | |
| Q912 | 8-729-822-44 | TRANSISTOR 2SA1524 | |
| Q913 | 8-729-806-22 | TRANSISTOR 2SC3864 | |
| Q914 | 8-729-230-45 | TRANSISTOR 2SC2458-YGR | |
| Q915 | 8-729-900-63 | TRANSISTOR DTA124ES | |

## POWER

| Ref. No. | Part No. | Description | | | Remark |
|---|---|---|---|---|---|
| Q916 | 8-729-230-45 | TRANSISTOR | 2SC2458-YGR | | |
| Q917 | 8-729-902-80 | TRANSISTOR | DTA114YS | | |
| Q918 | 8-729-904-36 | TRANSISTOR | DTC114YS | | |
| Q919 | 8-729-119-77 | TRANSISTOR | 2SA1175-FEK | | |
| Q920 | 8-729-922-34 | TRANSISTOR | 2SD1758-F5QR | | |
| | | < RESISTOR > | | | |
| R902 | 1-214-937-00 | CARBON | 1M | 5% | 1/2W |
| R903 | 1-249-556-11 | CARBON | 1.5K | 5% | 1/4W |
| R905 | 1-249-590-11 | CARBON | 39K | 5% | 1/4W |
| R906 | 1-249-590-11 | CARBON | 39K | 5% | 1/4W |
| R908 | 1-247-708-11 | CARBON | 470 | 5% | 1/4W |
| R909 | 1-247-708-11 | CARBON | 470 | 5% | 1/4W |
| R910 | 1-247-711-11 | CARBON | 680 | 5% | 1/4W |
| R911 | 1-247-711-11 | CARBON | 680 | 5% | 1/4W |
| R912 | 1-249-520-11 | CARBON | 47 | 5% | 1/4W |
| R913 | 1-249-520-11 | CARBON | 47 | 5% | 1/4W |
| R914 | 1-249-520-11 | CARBON | 47 | 5% | 1/4W |
| R915 | 1-249-520-11 | CARBON | 47 | 5% | 1/4W |
| R916 | 1-249-520-11 | CARBON | 47 | 5% | 1/4W |
| R917 | 1-249-520-11 | CARBON | 47 | 5% | 1/4W |
| R918 | 1-249-484-11 | CARBON | 6.8 | 5% | 1/2W |
| R919 | 1-249-484-11 | CARBON | 6.8 | 5% | 1/2W |
| R921 | 1-249-478-11 | CARBON | 2.2 | 5% | 1/2W |
| R922 | 1-249-424-11 | CARBON | 3.9K | 5% | 1/4W |
| R923 | 1-249-417-11 | CARBON | 1K | 5% | 1/4W |
| R924 | 1-249-413-11 | CARBON | 470 | 5% | 1/4W |
| R925 | 1-249-433-11 | CARBON | 22K | 5% | 1/4W |
| R926 | 1-249-419-11 | CARBON | 1.5K | 5% | 1/4W |
| R927 | 1-249-431-11 | CARBON | 15K | 5% | 1/4W |
| R928 | 1-247-721-11 | CARBON | 4.7K | 5% | 1/4W |
| R930 | 1-249-416-11 | CARBON | 820 | 5% | 1/4W |
| R931 | 1-249-433-11 | CARBON | 22K | 5% | 1/4W |
| R932 | 1-247-710-11 | CARBON | 560 | 5% | 1/4W |
| R933 | 1-249-417-11 | CARBON | 1K | 5% | 1/4W |
| R935 | 1-249-424-11 | CARBON | 3.9K | 5% | 1/4W |
| R936 | 1-249-413-11 | CARBON | 470 | 5% | 1/4W |
| R937 | 1-249-432-11 | CARBON | 18K | 5% | 1/4W |
| R938 | 1-249-415-11 | CARBON | 680 | 5% | 1/4W |
| | | < SWITCH > | | | |
| SW901 | 1-570-358-11 | SWITCH, SLIDE (FAN) | | | |
| | | < TRANSFORMER > | | | |
| T901 | 1-450-261-11 | TRANSFORMER, DC-DC CONVERTER | | | |
| | | < THERMISTOR > | | | |
| TH901 | 1-800-427-00 | POSISTOR | | | |
| TH902 | 1-800-427-00 | POSISTOR | | | |
| TH903 | 1-809-283-11 | POSISTOR | | | |
| TH904 | 1-806-064-11 | POSISTOR | | | |
| | | < VIBRATOR > | | | |
| X901 | 1-567-972-11 | VIBRATOR, CRYSTAL | | | |

**********

MISCELLANEOUS
**********

| | | | |
|---|---|---|---|
| 52 | 1-533-245-11 | HOLDER, FUSE | |
| 55 | 1-537-349-11 | TEMMINAL BOARD (4P) | (SP OUT) |
| 67 | 1-537-348-11 | TERMINAL BOARD (3P) | (REMOTE/+12V/GND) |
| 72 * | 1-640-180-11 | PC BOARD, PIN (L) | |
| 73 * | 1-640-181-11 | PC BOARD, PIN (R) | |
| C103 | 1-104-210-11 | CAP, FILM 0.0022MF | |
| C203 | 1-104-210-11 | CAP, FILM 0.0022MF | |
| C900 | 1-136-165-00 | CAP, METALIZED FILM 0.1MF | |
| F901 | 1-532-947-11 | FUSE (BRADE TYPE) | (AUTO FUSE) (30A) |
| F902 | 1-532-947-11 | FUSE (BRADE TYPE) | (AUTO FUSE) (30A) |
| J101 | 1-573-057-11 | JACK, PIN 1P | (INPUT/L) |
| J201 | 1-573-057-11 | JACK, PIN 1P | (INPUT/R) |
| M901 | 1-541-839-11 | MOTOR | |

**********

ACCESSORY & PACKING MATERIAL
**********

| | | |
|---|---|---|
| | 3-367-410-01 | SCREW (DIA. 5X15), TAPPING |
| * | 3-367-843-01 | CUSHION |
| * | 3-367-847-01 | INDIVIDUAL CARTON |
| | 3-681-190-01 | SHEET (LARGE), PROTECTION |
| | 3-753-124-21 | MANUAL, INSTRUCTION (US/CND, E) (ENGLISH, FRENCH) |
| | 3-753-124-11 | MANUAL, INSTRUCTION (AEP/UK, GERMANY) (ENGLISH, FRENCH, GERMAN, SPANISH, DUTCH, SWEDISH, ITALIAN, PORTUGUESE) |

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## HARDWARE LIST

| | | |
|---|---|---|
| # 3 | 7-682-546-13 | SCREW +B 3X5 |
| # 4 | 7-682-547-04 | SCREW +P 3X6 |
| # 6 | 7-682-348-13 | SCREW +RK 3X8 |
| # 7 | 7-683-419-06 | BOLT, HEXAGON SOCKET 4X8 |

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9-956-308-12

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Mobile Electronics Group

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